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NANO-STRUCTURED CERTIFICATES OF AUTHENTICITY USING PROBE ASSISTED DOPING

Docket: 14-004 Published: US 2015-0363682

Abstract

This invention is a rapid, large-scale deterministic dopant placement technique, and related metrology, to create structures that have a unique and customizable RF electronic signature by encoding information in their physical structure at the nanoscale. This invention will allow any manufactured item (integrated circuit, pharmaceutical, etc.) to be uniquely identifiable; enabling a secure Internet of Things (IoT) and eliminating counterfeit products. Uniquely identifiable manufactured products, securely addressable and counterfeit proof, will be a key enabler of the Internet of Things, a new era in the evolution of telecommunications where even the most mundane items are communicating with each other. The ability to create engineered 2D superlattices will enable new classes of electronic devices and directed self-assembly or interconnection of others.

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Status of Availability

This invention is available for licensing exclusively or non-exclusively in any field of use.

Last Modified: 01/12/2016